

Title (en)  
VALIDATION USING KEY PAIRS AND INTERPROCESS COMMUNICATIONS

Title (de)  
VALIDIERUNG MIT SCHLÜSSELPAAREN UND INTERPROZESSKOMMUNIKATION

Title (fr)  
VALIDATION À L'AIDE DE PAIRES DE CLÉS ET DE COMMUNICATIONS INTERPROCESSUS

Publication  
**EP 3874710 A1 20210908 (EN)**

Application  
**EP 19804920 A 20191023**

Priority  
• US 201862751804 P 20181029  
• US 201816176269 A 20181031  
• US 2019057545 W 20191023

Abstract (en)  
[origin: US2020134598A1] A validation system that includes a server and a validation terminal. The server is configured to receive location information for a mobile device and to determine the mobile device is at a registered location. The server is further configured to process a transaction for the products in a digital cart, to generate a barcode, and to encrypt the barcode using a private key linked with the registered location. The server is further configured to send the encrypted barcode to the mobile device. The validation engine is configured to scan the encrypted barcode using a barcode reader and to decrypt the encrypted barcode using the stored public key that is linked with the private key. The validation terminal is further configured to indicate the transaction is valid in response to decrypting the encrypted barcode using the public key.

IPC 8 full level  
**H04L 29/06** (2006.01); **G06Q 20/20** (2012.01); **G06V 30/224** (2022.01); **G07G 1/00** (2006.01); **H04W 4/021** (2018.01)

CPC (source: EP KR US)  
**G06Q 20/12** (2013.01 - US); **G06Q 20/123** (2013.01 - KR); **G06Q 20/204** (2013.01 - KR US); **G06Q 20/208** (2013.01 - EP KR); **G06Q 20/322** (2013.01 - EP); **G06Q 20/3224** (2013.01 - EP KR US); **G06Q 20/3274** (2013.01 - KR US); **G06Q 20/3276** (2013.01 - EP KR); **G06Q 20/38215** (2013.01 - EP KR); **G06Q 20/3823** (2013.01 - EP KR); **G06Q 20/3829** (2013.01 - EP KR); **G06Q 20/401** (2013.01 - EP KR); **G06Q 30/0635** (2013.01 - EP US); **G07G 1/0036** (2013.01 - EP); **G07G 1/0054** (2013.01 - EP); **H04L 9/30** (2013.01 - KR US); **H04L 9/3226** (2013.01 - KR US); **H04L 9/3297** (2013.01 - KR US); **H04L 63/062** (2013.01 - KR); **H04L 63/107** (2013.01 - EP KR); **H04W 4/021** (2013.01 - EP); **G06K 19/06037** (2013.01 - US); **G06Q 2220/00** (2013.01 - US); **H04L 63/062** (2013.01 - EP); **H04L 2209/56** (2013.01 - KR US); **H04L 2209/80** (2013.01 - KR US); **H04L 2463/102** (2013.01 - EP KR); **H04W 4/80** (2018.01 - EP); **H04W 12/77** (2021.01 - EP)

Citation (search report)  
See references of WO 2020092075A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 11062297 B2 20210713; US 2020134598 A1 20200430**; CA 3060241 A1 20200429; CN 112956169 A 20210611; CN 112956169 B 20220429; EP 3874710 A1 20210908; JP 2022509353 A 20220120; JP 7455853 B2 20240326; KR 20210083306 A 20210706; MX 2021004899 A 20210615; US 11915226 B2 20240227; US 2021233058 A1 20210729; WO 2020092075 A1 20200507

DOCDB simple family (application)  
**US 201816176269 A 20181031**; CA 3060241 A 20191025; CN 201980071874 A 20191023; EP 19804920 A 20191023; JP 2021547648 A 20191023; KR 20217016010 A 20191023; MX 2021004899 A 20191023; US 2019057545 W 20191023; US 202117226433 A 20210409